# GUIDELINES FOR STAIRWELL SIGNS IN MULTI-STOREY BUILDINGS

## Introduction

This guideline contains guidance for building owners and property managers to assist them in installing suitable directional egress signs within stairwells and signs intended to instruct people about the proper exit route in the event of fire.

Deaths have occurred in high-rise buildings when people have inappropriately tried to escape from a building by traveling up exit stairwells in an effort to escape at the roof level. In these instances, the stairways did not contain access to the roof and the people perished when they were overcome by smoke. The signs contained in this guideline are intended to prevent similar tragedies of this nature from occurring in the future.

The signs identified in this guideline were jointly developed through consultation with various organizations. The signs are of a universal nature intended to be easily understandable. The installation criteria for the signs is intended to ensure that they are installed in a suitable location that would be visible to people using a stairway to evacuate the building in a fire emergency.

The directional egress signs are intended to prompt people to travel in the correct direction in order to exit from the building. The precautionary signs are intended to warn people not to enter a dead end portion of a stairwell.

The use of these signs reinforce the emergency evacuation procedures outlined in the building's fire safety plan.

People must be aware that they have to take precautions to protect themselves from exposure to smoke. If people encounter smoke while they are in a stairwell, they should use an alternate stairwell to proceed to evacuate. If the alternate stairwell contains smoke, the people should find refuge in a suite, taking precautions to protect themselves.

## DIRECTION OF EGRESS SIGN

### Sign Purpose

People may not be familiar with the stairwell exiting arrangements of each building they enter. They may not know whether they should go up or down the stairs to exit the building in the event of an emergency.

The direction of egress signs are intended to indicate the direction of egress (travel) within a stairwell for the purpose of evacuating the building in an emergency.

### Sign Content and Colour

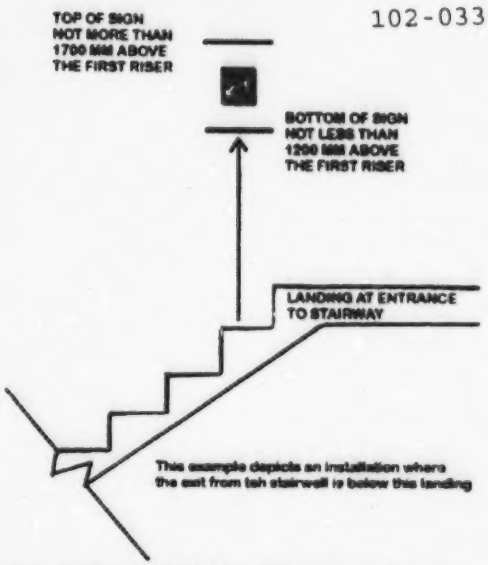
- Each sign shall depict the figure of a person walking down or up stairs. The sign shall include the word(s) "EXIT" or "EXIT/SORTIE" and a directional arrow displayed in front of the person figure oriented in the intended direction of egress.
- The minimum vertical and horizontal dimensions of each sign shall not be less than 190 mm.
- The sign shall be contrasting in colour so that the sign is clearly visible on the surface in which it is applied. (White, with a green background is the recommended colour contrast combination for this sign.)
- The sign shall have a contrasting border around the perimeter, where the sign is installed on a wall surface of a similar shade or colour.

Refer below to the example of signs depicting the variety of orientations which may be encountered within typical exit stairwells. (Appendix "A" depicts a directional sign conforming to the minimum size requirements referred to above.)

**Installation Criteria**

- A sign shall be permanently installed and maintained;
  - within each stairwell, and
  - at each landing which provides access to the stairs from each storey in the building.

- Each sign referred to above shall be installed;
  - directly above the first stair riser/step which leads in the direction of travel to the exit from that point within the stairwell, and
  - the bottom of the sign shall not be less than 1200 mm, and
  - the top of the sign shall not be more than 1700 mm above the first riser/step.


102-03358/
TOP OF SIGN NOT MORE THAN 1700 MM ABOVE THE FIRST RISER
BOTTOM OF SIGN NOT LESS THAN 1200 MM ABOVE THE FIRST RISER
LANDING AT ENTRANCE TO STAIRWAY
This example depicts an installation where the exit from teh stairwell is below this landing

- The direction of egress depicted by the person figure in the sign shall be oriented in the same manner reflecting the actual direction of travel within the stairwell at the point in which the sign is installed. (Refer to the figures on the previous page.)
- Additional signs may be installed within the stairwell.

## WARNING SIGNS

## TOP OF STAIRWAY TERMINATES AT A DEAD END

**Purpose**

There are two types of signs intended to warn people not to go up the stairs because the stairway terminates at a dead end without access to an exit. In the past, there have been a number of people who have died in a dead end portion of stairwells where they had been overcome by smoke during a serious fire.

In instances where a sign of this nature is required, the owner may choose to install signs in a manner conforming to one, or both options identified below.

**(Option A) Content for a Wall Sign**

- Each sign shall depict the figure of a person walking up stairs with a universal "no" symbol (circle with a bar crossing out the activity) and the words NO EXIT TO ROOF or NO EXIT TO ROOF / PAS DE SORTIE SUR LE TOIT displayed beside the universal no symbol.
- The outside diameter of the universal "no" symbol (red circle with a bar crossing out an activity) shall not be less than 140 mm (5 1/2 in).

**Colour of Wall Sign (Option A)**

- Black figure of a person, stairs, and text on a white background. The universal "no" (circle with a slash through it) shall be red.

**(Option B) Content for a Precautionary Sign Installed on a Stairway Riser**

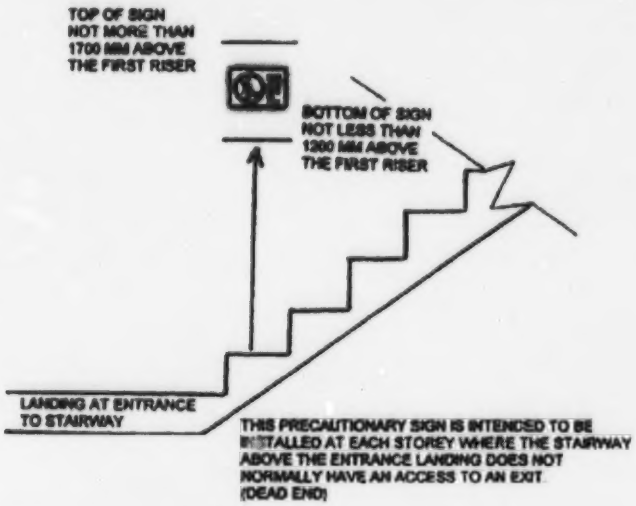
- Each sign shall depict the figure of a person walking up stairs with a universal "no" symbol (circle with a bar crossing out the undesired activity) and the words NO EXIT TO ROOF or NO EXIT TO ROOF / PAS DE SORTIE SUR LE TOIT displayed beside the universal no symbol.
- The outside diameter of the universal "no" symbol (red circle with a cross through it) shall not be less than 95 mm (3 3/4 in).
- The letters of the text NO EXIT TO ROOF or NO EXIT TO ROOF / PAS DE SORTIE SUR LE TOIT shall have a stroke of not less than 6 mm ( in) and a height of not less than 35 mm (1 3/8 in).

**Colour of Sign (Option B)**

- Black figure of a person, stairs, and text on a white background. The universal "no" (circle with a slash through it) shall be red.

**Installation Requirements for a Wall Sign (Option A)**

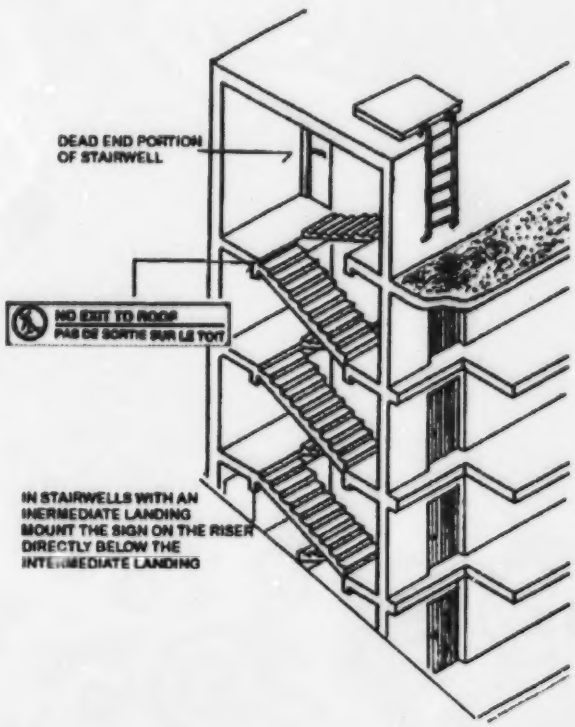
- When this option is chosen, the sign shall be permanently installed and maintained on the wall directly above the first stairway riser/step that leads to a "dead end portion of a stairwell".
- A dead end portion of a stairwell could include;
    1. an area above the highest cross over floor in a stairwell where cross over floors are provided, or
    2. an area above the last normally occupied storey, where the stairway only provides access to a locked mechanical area(s), or to a stairwell roof enclosure that does not have access to the roof.
- The bottom of the sign shall not be less than 1200 mm above the first riser/step and the top of the sign shall not be more than 1700 mm above the first riser/step.




**Installation - Stairway Riser Sign (Option B)**

**In A Stairwell With Intermediate Landings**

- When this option is chosen, the sign shall be permanently installed and maintained on the stair riser situated directly below the intermediate landing (in a stairway constructed with intermediate landings) which leads to a dead end portion of the stairway.

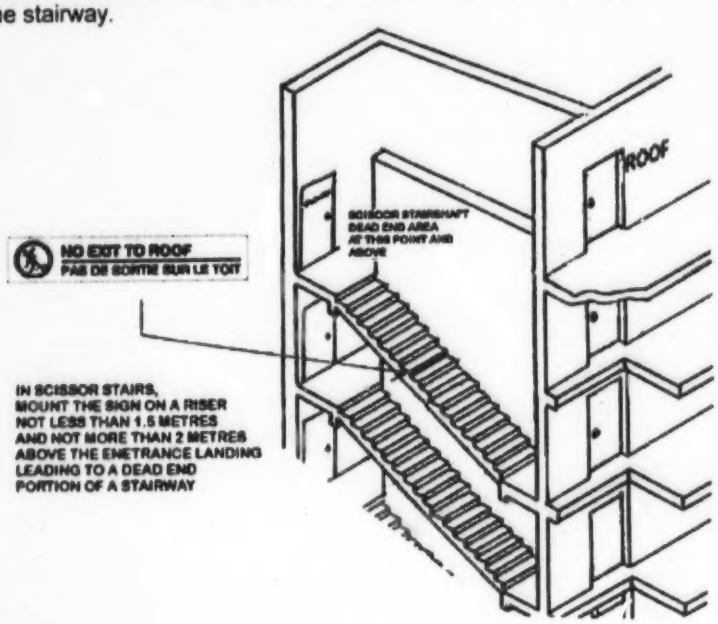



**Installation - Stairway Riser Sign (Option B)**

**In A Scissor Stairwell (Without Intermediate Landings)**

Where no intermediate landing is provided, (for example in scissors stairways) the sign shall be installed on a

stairway riser not less than 1.5 m and not more than 2 m above the entrance landing to the stairwell which lead to a dead end portion of the stairway.


NO EXIT TO ROOF
PAS DE SORTIE SUR LE TOIT
ROOF
IN SCISSOR STAIRS,
MOUNT THE SIGN ON A RISER
NOT LESS THAN 1.5 METRES
AND NOT MORE THAN 2 METRES
ABOVE THE ENETRANCE LANDING
LEADING TO A DEAD END
PORTION OF A STAIRWAY

## SIGNS FOR BASEMENT STAIRS

### Purpose

Most exit stairs are designed so that they end at the level of the exterior exit door. The purpose of this sign is to ensure that occupants are warned in those cases where a stair continues past the level of the exit.

### Sign Colour and Content

The Building Code (Article 3.4.5.2.) does not specify the exact content or colour of this sign. However, the content has to indicate that traveling down beyond the level of the exterior exit door does not lead to an exit. Suggested content could be: "No Exit Below This Floor". The recommended colour for the sign could be red letters on a contrasting background, or a red background with contrasting letters. It is suggested that the sign be a minimum of 190 mm in any dimension.

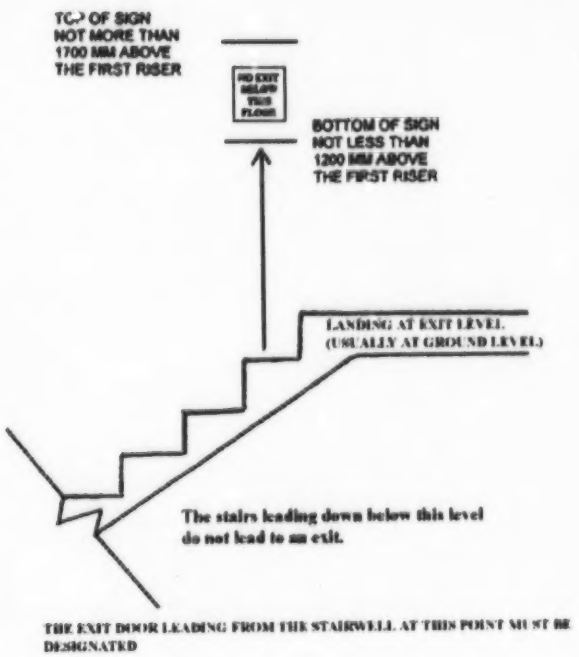
### Installation Criteria

The sign should be permanently installed and maintained within all exit stairwells in buildings over 2 storeys where the stair continues below the level of the exterior exit door.

It is recommended that each sign be installed directly above the first stair riser/step below the level of the exterior exit door on the side which will be most visible to people going down the stairs.

The bottom of the sign should be no less than 1200 mm and no more than 1700 mm above the first riser/step.

Additional signs may be installed if necessary.


TOP OF SIGN NOT MORE THAN 1700 MM ABOVE THE FIRST RISER
NO EXIT BELOW THIS FLOOR
BOTTOM OF SIGN NOT LESS THAN 1200 MM ABOVE THE FIRST RISER
LANDING AT EXIT LEVEL (USUALLY AT GROUND LEVEL)
The stairs leading down below this level do not lead to an exit.
THE EXIT DOOR LEADING FROM THE STAIRWELL AT THIS POINT MUST BE DESIGNATED

## EMERGENCY ACCESS TO FLOOR AREAS

### Sign Purpose

The Building Code (Article 3.4.6.17.) requires that in a building over 6 storeys, emergency access is required to be provided out of an exit stairwell to permit people to leave the stairwell and enter a floor area, should the stairwell become blocked by smoke or other obstructions above the exit level. Signs are required to indicate which doors within the exit stairs will provide emergency access to the floor areas.

### Sign Content and Colour

The Building Code does not specify the exact content or colour of this sign. However, those doors required to provide emergency access to floor areas are required to be identified by a sign on the stairway side to indicate that they are openable from that side.

Suggested wording could be: "Emergency access to floor area through this door".

The recommended colour for the sign could be green letters on contrasting background, or a green background with contrasting letters. It is suggested that the sign be a minimum of 190 mm in any dimension.

Additional signs may be installed on floor levels where the doors are locked. The additional signs would indicate which storey(s) the required emergency access to the floor area is provided. These signs could read: "Emergency access to floor area on floor _____" (insert the appropriate floor number).

### Installation Criteria

The signs are required to be mounted on the stairway side of those doors which the Building Code requires not to have locking devices that would prevent entry. Those doors are into:

a. any floor area designated as an area of refuge;
b. at least one door every five storeys or less;
c. at least one of the three highest storeys.

The sign should be permanently installed and maintained where required.

It is recommended that required signs be installed either on the door, or on the latch side of the door in a manner which will be most visible to people going down the stairs.

The bottom of the sign should be no less than 1200 mm and no more than 1700 mm above the floor level.

## FLOOR NUMBERING AND STAIRWELL SHAFT DESIGNATION

### Sign Purpose

In order to help orient people in the event of an emergency, the number of each floor and a designation assigned to each exit stair shaft are required by the Building Code (Article 3.4.6.18.) to be mounted permanently on each side of a door to an exit stair shaft.

### Sign Content and Colour

The assigned floor number must be shown as an Arabic numeral that is contrasting in colour with the surface to which it is applied.

The designation assigned to each exit stair shaft must be shown as an UPPER CASE LETTER that is contrasting in colour with the surface to which it is applied.

### Installation Criteria

The assigned floor number and the designation assigned to each exit stair shaft shall be permanently mounted on each side of doors to an exit stair shaft and be:

a. not less than 60 mm high,

b. raised approximately 0.7 mm above the surface,

c. be located 1500 mm from the finished floor

**NOTE:** The Fire Code requires floor numbering to be provided in existing buildings regulated by Section 9.6. The requirements specified by the Fire Code are similar in nature to the requirements specified above. The Chief Fire Official has the authority to accept floor numbering signs installed in accordance with either requirements under the provisions of Article 9.1.2.4. of the Fire Code.



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Last Modified: October 15, 1999.